Executive Summary

Influenza is a highly infectious viral illness that causes yearly seasonal epidemics reported since at least the early 1500's. In the U.S., complications of influenza cause an average of 36,000 deaths each year, primarily among the elderly. Influenza virus is transmitted in most cases by droplets through the coughing and sneezing of infected persons, but it can be transmitted by direct contact. Typical symptoms include abrupt onset of fever (101°F to 102°F), headache, chills, fatigue, muscular pain or tenderness, sore throat, and nonproductive cough, and may include runny or stuffy nose. An annual influenza vaccination is the best method of protection against influenza. Other measures, such as frequent hand washing, staying home when sick, and the institution of public health measures for universal respiratory hygiene and cough etiquette, will help stop the spread of influenza.

Influenza viruses are unique in their ability to cause sudden infection in all age groups on a global scale. A pandemic – or global epidemic occurs when there is a major change in the influenza virus so that most or all of the world's population has never been exposed previously and is thus vulnerable to the virus. Three pandemics occurred during the 20th century. The Spanish Flu, in 1918 caused over 500,000 U.S. deaths and more than 20 million deaths worldwide. The Asian Flu Pandemic of 1957-58 and the Hong Flu Pandemic in 1968-69 also had a significant impact causing widespread illness and death. Recent outbreaks of human disease caused by avian influenza strains in Asia and Europe have highlighted the potential for new influenza strains to be introduced into the population.

An influenza pandemic has a greater potential to cause rapid increases in illness and death than virtually any other natural health threat. The impact of the next pandemic could have a devastating effect on the health and well being of the American public. The Centers for Disease Control and Prevention (CDC) estimates that, in the United States alone, up to 200 million people will be infected, 50 million people will require outpatient care, two million people will be hospitalized, and between 100,000 and 500,000 persons will die. Using software provided by the Centers for Disease Control and Prevention (CDC), it was estimated that in Maine, there would be approximately 165,000 outpatient visits, 4,000 hospital admissions, and 900 deaths during an influenza pandemic. Effective preventive and therapeutic measures including vaccines and antiviral agents will likely be in short supply, as may some antibiotics to treat secondary infections. Health-care workers and other first responders will likely be at even higher risk of exposure and illness than the general population, further impeding the care of victims. Widespread illness in the community will also increase the likelihood of sudden and potentially significant shortages of personnel who provide other essential community services.

Unlike many other public health emergencies, an influenza epidemic will impact multiple communities cross Maine simultaneously. Therefore, contingency planning is required to moderate the impact through a coordinated effort at all levels of government, and in collaboration with local partners. Advanced planning for a large scale and widespread public health emergency is required to optimize health care delivery through a pandemic.

This planning document has been designed to ensure that Maine is prepared to implement an effective response before a pandemic arrives and throughout a response if an outbreak occurs. The plan is intended to be dynamic and interactive; it consists of preparedness and response components that are consistent with international and federal guidelines as well as general principles of emergency response.

The Maine Pandemic Influenza Plan – Draft 07/05

The Maine Pandemic Influenza Draft Plan is based on guidelines provided by:

Draft Pandemic Influenza Preparedness and Response Plan. Washington, DC: U. S. Department of Health and Human Services; August 2004.

WHO global influenza preparedness plan: The role of WHO and recommendations for national measures before and during pandemics. Switzerland, World Health Organization, Department of Communicable Disease Surveillance and Response Global Influenza Programme: 2005.

Pre-pandemic (WHO Phase 1,2)
No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, or a circulating animal influenza poses a substantial risk of human disease.

LEVEL I (WHO Phase 3)
Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

LEVEL II (WHO Phase 4)
Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

LEVEL III (WHO Phase 5)
Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

LEVEL IV (WHO Phase 6)
Pandemic Phase: Increased and sustained transmission in the general population.

LEVEL V Post-Pandemic
Indices of influenza activity have returned to pre-pandemic levels.

The Draft Maine Pandemic Influenza Plan with annexed guidelines, resources, and other documents was developed to assist with the main components of planning, including:

- Command and Control
- Surveillance
- Vaccine Delivery
- Antiviral Medication Use
- Community-based Containment Measures
- Emergency Response: Health and Medical Maintenance of Critical Services
- Communications

This plan outlines roles, responsibilities and key activities before, during, and following a pandemic influenza. It is a work in progress that will be updated and added to as situations arise and dictate.

The overall goal of pandemic preparedness and response is to minimize serious illness and overall deaths, and to minimize societal and infrastructure disruption among Maine citizens during and following an influenza pandemic.